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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,117	05/25/2000	MAKOTO YAMAMOTO	05905.0109	4314

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT PAPER NUMBER

2675

DATE MAILED: 07/16/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

TR

Office Action Summary	Application No. 09/555,117	Applicant(s) YAMAMOTO, MAKOTO	
	Examiner Srilakshmi K. Kumar	Art Unit 2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 18 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 14, 16, 17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3 and 4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 22 and 23 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to independent claim 22, "An image generating device for generating images requiring the collision judgment between a movable object moving within a virtual three dimensional space and a structural object arranged in said space, comprising collision judgment means for judging the collision with said movable object while moving said structural object."

Applicant states in the first part of the claim the movable object is moving, while the end of the claim states the structural object is moving. It is unclear as to which object is moving. Further, since the structural object moves, is the structural object also the "said movable object"? Appropriate correction is required.

As to claim 23, it is rejected as it depends upon a rejected base claim.

3. Claim 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 24 recites the limitation "said image generating device" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 1 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyamoto et al (US 6,139,433).

As to independent claim 1, Miyamoto et al disclose an image generating device for generating images capturing a moveable object moving within a virtual three dimensional space from a movable viewpoint in said virtual three dimensional space (col. 1, lines 53-65, col. 2, lines 30-65) comprising: movement means for controlling the movement of said camera viewpoint upon utilizing the position relationship between the observable point set in relation to said movable body and the line of sight of the current camera viewpoint (col. 12 line 50-67, col. 25, lines 10-46).

As to independent claim 24, a storage medium storing a program for executing the respective means of said image generating device (Fig. 1, item 68)

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7. Claims 12 and 13 rejected under 35 U.S.C. 102(e) as being anticipated by Kami et al. (US 5,853,324).

As to independent claim 12, Kami et al disclose an image generating device for displaying on a display, images for a player to play a gun shooting game with an enemy character existing in a virtual game space (Figs. 1, 7A-C), said image generating device comprising, image processing means for performing image display suggesting in advance to the player an attack made by said enemy character to said player (col. 7, line 48-col. 8, line 65).

As to dependent claim 13, limitations of claim 12, and further comprising wherein said image display is a display of a bullet fired from said enemy character and flying toward said player in actual space (Figs. 8A-C, col. 10, lines 29-53).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-11, 15, 18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al (US 6,139,433) in view of Kami et al. (US 5,853,324).

As to independent claim 15, limitations of claim 12, and further comprising wherein said image generating device comprising, AI processing means for executing AI processing incorporating emotions of said character influenced between circumstances, evaluation/determination and factors of behaviors in said game as shown by Miyamoto et al in Fig. 32 and col. 44, line 57-col. 45, line 31.

As to independent claim 18, Miyamoto et al disclose in Figs. 27A & 27B and in col. 39, line 58-col. 40, line 65, an image generating device for generating images by representing a moveable object simulating a person (shown by Miyamoto in the form of "Mario"), and moving inside a virtual three dimensional space as a plurality of parts connected via connection points (Fig. 27A), said image generating device comprising, first specifying means for specifying a subpart on the terminal side and a main part on the central side with respect to two adjacent parts among a plurality of parts, shown by Miyamoto in Fig. 27A, items 1608 and 1610; first operating means for operating the impulse of the subpart motion communicated to the main part under the presumption that the connection point of said subpart to said main part is a fixed point, first repeating means for repeating, in a recurring manner the movements of said first specifying means and said first operating means from the terminal side of said moveable object to the central side thereof as shown by Miyamoto in Fig. 27B and col. 40, the different movements capable of the moveable object.

As to dependent claim 2, limitations of claim 1, and further comprising wherein said virtual three dimensional space is a game space (col. 1, line 53-col. 2, line 10), and said moveable body is an enemy in a gun shooting game enacting in said game space.

Miyamoto et al do not disclose where the moveable body is an enemy in a gun shooting game. Kami et al disclose in Figs. 7A-C and col. 7, line 61-col. 8, line 64, a gun shooting game with an enemy. Miyamoto et al also disclose where the virtual game space includes different courses in col. 2, lines 19-40. It would have been obvious to one of ordinary skill in the art to incorporate the gun shooting game of Kami et al into the system of Miyamoto et al as they both

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are gaming systems with three dimensional virtual space and further Miyamoto et al is able to change the courses.

As to dependent claim 3, limitations of claim 2, and further comprising, display means for displaying said game space on a screen (Fig. 1, item 58);

Kami et al disclose a gun unit (Fig. 1, item 20) capable of producing signals toward said screen by the play manipulating the trigger (Figs. 1 and 2); a sensor for detecting the arrival position of said signals on the screen of said display means (Fig. 2, items 12 and 200, and col. 6, lines 14-53); and game implementing means for implementing a gun shooting game between said enemy and player based said arrival position (Figs. 7A-C, col. 7, line 61-col. 8, line 64).

Though Miyamoto et al do not disclose a gun shooting game, Miyamoto et al also disclose where the virtual game space includes different courses in col. 2, lines 19-40, and disclose input type devices in Fig. 1, items 56a and 56b. It would have been obvious to one of ordinary skill in the art to incorporate the gun shooting game with the gun input device as shown by Kami et al into the system of Miyamoto et al as they both are gaming systems with three dimensional virtual space and Miyamoto is capable of including different types of courses.

As to dependent claim 4, limitations of claim 3, and further comprising, wherein the position of said observable point is at a different position then that of said movable body, further comprising, observable point moving means for moving this observable point toward said movable body for each display of one frame of said image (Fig. 11B and col. 25, lines 9-46).

As to dependent claim 5, limitations of claim 4, and further comprising wherein said observable point moving means is means for moving, for each display of one frame of said image and along the straight line distance connecting said observable point and the position of

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said movable object, said observable point toward said movable object side in prescribed distances of the direct distance thereof as shown in col. 37, line 8-col. 38, line 13.

As to dependent claim 6, limitations of claim 4, and further comprising wherein said observable point moving means comprises, means for operating the open angle between the current line of sight extending from said camera viewpoint and the line extending from the camera viewpoint through said observable point, means for operating prescribed rotational angle from such open angle and means for rotating, for each display of one frame of said image, said camera viewpoint toward said observable point side at said rotational angle as shown in col. 37, line 8-col. 38, line 13.

As to dependent claim 7, limitations of claim 3, and further comprising wherein said moving means comprises, judging means for judging the occurrence of specific circumstances of the relative position relationship between said camera viewpoint and said observable point; and viewpoint movement control means for controlling the position of said camera viewpoint so as to continuously capture the position of said observable point as shown in col. 37, line 8-col. 38, line 13.

As to claims 8-10, 21-23, see claims 4-7, above.

As to dependent claim 11, limitations of claim 9, and further comprising avoidance manipulation means for a player to manipulate the character to avoid the bullet fired from said enemy. Miyamoto et al do not disclose avoidance of a bullet fired from said enemy. Kami et al disclose a defense state as shown in Fig. 7A, and col. 7, line 61-col. 8, line 64. Though Miyamoto et al do not disclose a gun shooting game, Miyamoto et al also disclose where the virtual game space includes different courses in col. 2, lines 19-40, and disclose input type

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devices in Fig. 1, items 56a and 56b. It would have been obvious to one of ordinary skill in the art to incorporate the gun shooting game with the manipulation means to be in a defense state as shown by Kami et al into the system of Miyamoto et al as they both are gaming systems with three dimensional virtual space and Miyamoto is capable of including different types of courses.

Allowable Subject Matter

10. Claims 14, 16, 17, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any response to this action should be mailed to:

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Or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label
“PROPOSED” or DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,
Arlington, VA, Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Srilakshmi K. Kumar whose telephone number is 703 306 5575.
The examiner can normally be reached on 8:00 am to 5:30 pm alternate Fridays off.

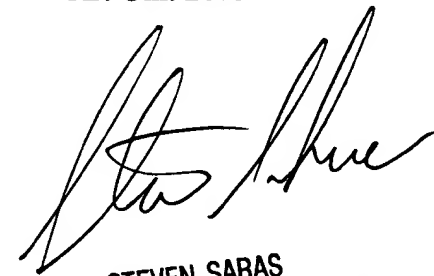
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703 305 9720. The fax phone numbers for the organization where this application or proceeding is assigned are 703 306-0377 for regular communications and 703 308 9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 4700.

Srilakshmi K. Kumar
Examiner
Art Unit 2675

SKK
June 30, 2002

A handwritten signature in black ink, appearing to read 'Steven Saras', is written over a rectangular stamp.

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600